

REMARKS

In response to the Office Action dated October 10, 2006, Applicant respectfully requests reconsideration based on the above claim amendments and the following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance.

Claims 1-26 are pending. Claims 1-26 have been rejected. Claims 1, 9, 17 and 22 are independent claims from which claims 2-8, 10-16, 18-21 and 23-26 respectively depend.

While Applicants do not agree with the grounds for rejection and responses to argument, in the interest of furthering prosecution, Applicants have amended the independent claims to more particularly point out the invention, which renders the stated grounds for rejection moot. Applicants respectfully submit that the claims, as amended, define over the prior art. No new matter has been added. Support for the amendments can be found in the application as originally filed in paragraph [0004] and elsewhere.

Confirmation of Acceptance of Formal Drawings

Applicant thanks the Examiner for accepting the formal drawings filed by Applicant on April 14, 2004.

§103(a) Rejections

Claims 1, 7, 9 and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiter (U.S. Patent No. 5,752,243) in view of Bumbulis (U.S. Publ. No. 2003/0204513). Applicant respectfully submits that these claims are allowable because Reiter and Bumbulis are not properly combined. Moreover, even if properly combined, neither Reiter nor Bumbulis disclose or suggest all the non-obvious features of Applicant's claims as amended.

Reiter is directed to storing and accessing multidimensional data using a multi-dimensional B-tree. When a unit of data is too large to be stored in a single page, a tree manager splits a node or a unit of subdata into a subnode and a subtree. The subtree is stored on a new page. If the unit of subdata cannot be split into a subnode and a subtree, then one or more of the nodes currently stored on the page are moved to a new page. Reiter does not address renaming elements of a directory represented as a B-tree, as recited by Applicant's amended claims.

Bumbulis is improperly combined with Reiter because Bumbulis is directed to creation of a B-tree index for a Database Management System (DBMS). An index differs from a file system directory because an index does not require a rename operation. In a DBMS, an index is used to enable specific records to be located faster and to be sorted more easily, not to find and manage hierarchically arranged elements by pathname. Hence one of skill in the art would not be motivated to look to this area of the art for solutions to problems that may arise when renaming elements of a file system represented by a B-tree. Moreover, even if properly combined, Bumbulis does not disclose or suggest renaming elements of a directory as recited by Applicant's amended claims.

As neither Reiter nor Bumbulis, alone or in combination disclose or suggest at least the above described features, Applicant respectfully submits that amended claims 1 and 9 are allowable, as are claims 7 and 15 which depend respectively therefrom. Applicant thus respectfully requests the withdrawal of the 103 rejections of these claims.

Claims 2-4, 10-12, 17, 18, 21-23 and 26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiter in view of Bumbulis and further in view of Rao (U.S. Patent No. 5,689,706). Applicant respectfully submits that these claims are allowable because Reiter and Bumbulis are not properly combined, as discussed above. Furthermore, Reiter and Rao are not properly combined. Moreover, even if properly combined, Reiter, Bumbulis and Rao, alone or in combination do not disclose or suggest all the non-obvious features of Applicant's claims as amended.

As described above, Bumbulis is improperly combined with Reiter. Moreover, Rao is improperly combined with Reiter because Rao is directed to synchronization of sequential read and write operations using tokens in a loosely connected distributed system. Rao does not even mention renaming or B-trees. One of skill in the art would not be motivated to look to this area of the art for solutions to problems that may arise when renaming elements of a file system represented by a B-tree. Moreover, even if properly combined, Reiter, Bumbulis and Rao do not disclose or suggest all of the non-obvious features of Applicant's amended claims.

As described above, neither Reiter nor Bumbulis disclose or suggest at least renaming elements of a directory represented as a B-tree, as recited by Applicant's amended claims 1, 9, 17 and 22, from which all the other claims listed above depend. Rao does not cure the deficiencies of Reiter and Bumbulis. Rao is directed to synchronization of sequential read and write operations using tokens in a loosely connected distributed system. Rao does not disclose or suggest renaming elements of a directory represented as a B-tree. As Reiter, Bumbulis, and Rao alone or in combination fail to disclose or suggest at least the above described feature, Applicant respectfully submits that amended claims 1, 9, 17 and 22 are allowable, as are claims 2-4, 10-12, 18, 21, 23 and 26 which depend respectively therefrom. Applicant thus respectfully requests the withdrawal of the 103 rejections of these claims.

Claims 5, 6, 13, and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiter in view of Bumbulis and further in view of Li et al (U.S. Publ. No. 2002/0198891). Applicant respectfully submits that these claims are allowable because Reiter and Bumbulis are not properly combined, as discussed above. Furthermore, Reiter and Li are not properly combined. Moreover, even if properly combined, Reiter, Bumbulis and Li, alone or in combination do not disclose or suggest all the non-obvious features of Applicant's claims as amended.

As described above, Bumbulis is improperly combined with Reiter. Moreover, Li is improperly combined with Reiter because Li is directed to an extensible structure for software modules that can be used to construct an object-oriented extension of a DBMS. One of skill in the art would not be motivated to look to this area of the art for solutions to problems that may arise when renaming elements of a file system represented by a B-tree. Moreover, even if properly combined, none of the cited references disclose or suggest all of the non-obvious features of Applicant's amended claims.

As described above, neither Reiter nor Bumbulis disclose or suggest at least renaming elements of a directory represented as a B-tree, as recited by Applicant's amended claims 1, and 9 from which all the other claims listed above depend. Li does not cure the deficiencies of Reiter and Bumbulis. Li is directed to an extensible structure for software modules that can be used to construct an object-oriented extension of a DBMS. Li does not disclose or suggest renaming elements of a directory represented as a B-tree.

As Reiter, Bumbulis, and Li alone or in combination fail to disclose or suggest at least the above described feature, Applicant respectfully submits that amended claims 1, and 9 are allowable, as are claims 5, 6, 13, and 14 which depend respectively therefrom. Applicant thus respectfully requests the withdrawal of the 103 rejections of these claims.

Claims 8 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiter in view of Bumbulis and further in view of Cheng et al (U.S. Patent No. 5,204,958) and Beyer et al (U.S. Publ. No 2006/0173927). Applicant respectfully submits that these claims are allowable because Reiter and Bumbulis are not properly combined, as discussed above. Furthermore, Reiter and Cheng are not properly combined. Moreover, even if properly combined, Reiter, Bumbulis, Cheng, and Beyer alone or in combination do not disclose or suggest all the non-obvious features of Applicant's claims as amended.

As described above, Bumbulis is improperly combined with Reiter. Moreover, Cheng is improperly combined with Reiter for the same reason as Bumbulis. Cheng is directed to using a B-tree for a DBMS index. An index differs from a file system directory because an index does not require a rename operation. Hence one of skill in the art would not be motivated to look to this area of the art for solutions to problems that may arise when renaming elements of a file system represented by a B-tree. Moreover, even if properly combined, none of the cited references disclose or suggest all of the non-obvious features of Applicant's amended claims.

As described above, neither Reiter nor Bumbulis disclose or suggest at least at least renaming elements of a directory represented as a B-tree, as recited by Applicant's amended claims 1, and 16 from claims 8 and 16 depend. Cheng does not cure the deficiencies of Reiter and Bumbulis. Cheng is directed to maintaining an index file to a DBMS where an indexed pointer is maintained for new records added to a DBMS in a B-tree stored in RAM. The B-tree holding the new records is periodically merged into the full index file (also a B-tree). Cheng does not disclose or suggest renaming elements of a directory represented as a B-tree. Beyer does not cure the deficiencies of Reiter, Bumbulis and Cheng. Beyer is directed to an extensible identification system where each node in a hierarchy is assigned concatenated decimal values so that the order of a node and its parent child sibling relationships can be determined. Beyer does not disclose or suggest renaming elements of a directory represented as a B-tree.

As Reiter, Bumbulis, Cheng and Beyer alone or in combination fail to disclose or suggest at least the above described feature, Applicant respectfully submits that amended claims 1, and 9 are allowable, as are claims 8 and 16 which depend respectively therefrom. Applicant thus respectfully requests the withdrawal of the 103 rejections of these claims.

Claims 19, 20, 24 and 25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reiter in view of Bumbulis and further in view of Rao and Li. Applicant respectfully submits that these claims are allowable because Reiter and Bumbulis are not properly combined, as discussed above, because Reiter and Rao are not properly combined and because Reiter and Li are not properly combined, as described above. Moreover, even if properly combined, Reiter, Bumbulis, Rao and Li, alone or in combination do not disclose or suggest all the non-obvious features of Applicant's claims as amended, as described above.

As Reiter, Bumbulis, Rao and Li alone or in combination fail to disclose or suggest at least the above described feature, Applicant respectfully submits that amended claims 17 and 22 are allowable, as are claims 19-20 and 24-25 which depend respectively therefrom. Applicant thus respectfully requests the withdrawal of the 103 rejections of these claims.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present Application is in condition for allowance. Withdrawal of the rejections of the claims and an early allowance is earnestly solicited.

Date: January 9, 2007

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